

Tai Chi Chuan

国际杨氏太极拳协会杂志

JOURNAL OF THE INTERNATIONAL YANG FAMILY TAI CHI CHUAN ASSOCIATION

SUMMER 2016

38



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All Tai Chi Chuan enthusiasts are invited to submit articles, letters, and pictures for publication. Both critical and complimentary letters concerning the form and content of this journal are welcome. Please send correspondence in electronic format to: editor@yangfamilytaichi.com

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LETTER FROM THE EDITOR

DAVE BARRETT

Editor



This is a really interesting job. I get to correspond with people all over the world. They send in articles; we work together on them, improving and refining the pieces and then send them out to you. I am so grateful for the many years (16) I have been able to do this. It has enriched my world and my understanding of Taijiquan's place in it.

For the past four issues we have featured articles on the brain, how it works and how we learn. Dan Shulz and Holly Sweeney-Hillman have guided us through this complex topic with extraordinary precision. Neuroscience is not easy. Life is short and Taijiquan is long. Forgive me, gentle reader, these articles are not light reading. I continue to puzzle over them and ponder their messages. I will tell you this: they contain a wealth of practical insights for learning, teaching, studying and performing Taijiquan.

If there is one concept that you take away from our final installment of The Learning Brain it is this: Light Touch creates stability. The idea is that by reaching out and making contact very lightly during a balance loss, we can instantly regain our bearings.

This information is something you should understand and be able to explain to those in your life who use canes or walkers for safety. In my own family, the reluctance to adopt these tools as balance deteriorates with age has had fatal consequences. Rest in peace, Nana.

Every Friday, I teach for an hour at a supported living facility. It's a wonderful group, mostly in their 80's and 90's. They can only stand up for 5 minutes at a time; most use walkers and there are a few who need to but don't.



“Clarity, equilibrium and maximum consciousness.”

For the past many weeks, as I have been working on The Learning Brain part 3, I have been teaching and testing the “Light Touch creates stability” message. We do Qi Shi, the hands up-hands down opening movement. I ask them to imagine they are standing in a doorway and that as their hands come up chest high they lightly touch either side of the doorframe. As their hands come down I ask them to visualize they are lightly placing their fingertips on a tabletop. I send them back to their apartments with the assignment to actually do the motions with a doorframe and a tabletop.

Just this Friday, Bill (92) began to pitch backwards towards his chair. His hand reached for his walker and instead of grabbing it, he just placed his palm on the top of the handle.

He came back up. “Nice save, Bill! That touch told you which way was up, didn’t it?” With a big smile Bill announced, “You are darn right it did.”

In my long form classes we have been working on a method that uses the Light Touch concept during the kicking sequences. Let’s be honest here, gentle reader. Even the most accomplished among us is uneasy when performing these. I’ve asked the group to find a hallway at home, so that when they open from the cross hands to extend during the kick their fingertips make actual contact with the walls on either side.

Just yesterday, in class, when I suggested that they imagine the contact on either side as they kick, Karen couldn’t contain her glee. “Amazing! I was so focused on

reaching out to the damn wall, I didn’t realize my foot had come up to kick!” She has Multiple Sclerosis and deals heroically with significant deficits. Normally her foot does not leave the ground during a kick.

I’m telling these stories to encourage you to read, re-read, puzzle and ponder The Learning Brain series. Let me know what you think.

The cello virtuoso Maestro Yo-Yo Ma was recently asked what is his idea of perfect happiness?

“Clarity, equilibrium and maximum consciousness.”

I wish you the same.





FIND YOUR BALANCE

An Interview with Grandmaster Yang Jun

FERNANDO DE LAZZARI

Director, Yang Chengfu
Tai Chi Chuan Center
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Fernando De Lazzari: *First, I would like to thank you for this great opportunity to have this interview and talk about Tai Chi Chuan with you. I really appreciate this moment.*

Many people think Tai Chi Chuan is a practice for relaxation with soft movements, but we know Tai Chi Chuan is an Art with many aspects. How do we answer the question, "What is Tai Chi Chuan?"

Master Yang Jun: Tai Chi Chuan actually is a multiple function exercise. It was created as a martial art. It has developed into a special way of exercising. It works in many areas. Today many people are coming to Tai Chi Chuan for its health benefits. It is benefiting many people with disabilities, and those who cannot do some hard exercise. Many appreciate how effective it is in reducing stress. This is how Tai Chi Chuan is working for this group of people. But you know, Tai Chi Chuan has a deep philosophy behind it. It can help you to understand yourself better. It can improve your lifestyle

by helping to find your balance, and become a better-balanced person. And not only that – actually Tai Chi Chuan is a type of martial art that uses a very different approach from many other martial arts. It asks you to soften yourself and relax yourself. One must explore the soft then unify the soft with the hard. And also it has a goal – to make ourselves use the soft balanced with the hard, and the basic method involves seeking a balance. We must understand the dynamics of balanced energy. I think many people watching Tai Chi Chuan really don't see this, because they see the soft flowing motions.

People doing the soft Form don't really have the whole picture of Tai Chi Chuan. It actually is a whole system of training: standing meditation, moving practice, slow practice, fast practice, self practice, partner practice, bare hand practice, weapons practice. It is a complete training system. It's not just like, you know, sometimes what we see in the park, people are practicing the movements in a soft, slow way. Most people assume that this is for senior people, for the people who have health issues, but Tai Chi Chuan can be useful for every type of person. Especially for the people who are looking for an exercise that balances the body and mind. It's not just physical movements, it has internal understanding and physical performing combined.

FDL: *Can we consider Tai Chi Chuan a kind of meditation? Why?*

MYJ: Yes, we can. We say that Tai Chi Chuan is a kind of meditation exercise. So first, from the physical movement point of view, it includes a stillness practice. Even when we are practicing the Form sequence: the body moves, we ask you to maintain a calm mind. So, from many points of view, we want you to be self-balanced, to be calm in your mind. The goal of calming the mind is to keep yourself centered, to have a clear picture and a complete understanding of the whole situation. So that's why we consider Tai Chi Chuan a kind of meditation practice. We also have a very special method of relaxation. It is not just a physical relaxation; it is also a mental relaxation. We ask you not to put your tension in a detailed local area; we must have an understanding, an overview, →



We want you to be self-balanced, to be calm in your mind.



which balances internal functions with external situations. So one part of the relaxation is about your body, the other part is about your mind.

FDL: *Tai Chi Chuan can help improve people's health. Nowadays so many people are interested in practicing Tai Chi, and the number is growing. In your opinion, why do you think that the number is increasing?*

MYJ: First of all, why people are so enthusiastic about it is because they have tried the practice and received the benefits. We are involved in ongoing programs with academics to study Tai Chi Chuan's benefits. In China and in the West, often you can see doctors recommending Tai Chi Chuan as a choice for health exercise. And recently I also heard that President Obama encourages people to use Tai Chi Chuan for their health practice. So, many people in many different areas are doing research to understand Tai Chi Chuan's health benefits, which makes people aware that Tai Chi Chuan can help people; this is the first thing.

Second: Tai Chi Chuan has a special way of practice, which is truly gentle, slow and even, with a focus on understanding energy. This is the difference from many other kinds of exercise. We require that you harmonize the physical practice with your mental awareness. From this balanced combination of internal and external we can develop a unity

of body, mind, and spirit.

As we learn more about Tai Chi, we understand that Yin and Yang are combined together in a dynamic balance— this is Taiji. So many people involved in Tai Chi are also interested in the philosophical foundations of our practice. This Taiji theory helps you with the mind and mental balance, mind understanding, dealing with your colleagues, dealing with your personal issues, and how you can find your balance without big conflicts.

Many, many areas of Tai Chi Chuan are very special. I believe that because of this kind of difference from many other exercises, people are interested and involved with Tai Chi Chuan. An interesting aspect of our practice is that the more you understand Tai Chi Chuan, the more you can learn from Tai Chi Chuan. It's not just learning the movements, and then you are finished. We are going to keep practicing the same movements, but your mind keeps improving your understanding from your personal feeling throughout the practice. Then you can expand into theory study, using our theories to guide and enrich your practice

This is a kind of exercise that is unique and different from many others. So that's why I believe that the more people practice and study, the deeper their understanding Tai Chi becomes.

FDL: *What is the ultimate goal of the Tai Chi Chuan practice?*

MYJ: Basically, we have three goals for practice – one is rooting, which creates physical balance. The second is how you can unify your energy. Throughout your physical performing and practice – you want to improve in these areas. But Tai Chi Chuan is not just for your physical balance and unifying your energy – it is about your spirit.

The process of your practice is first to exercise your body, and in the second stage, you can understand your heart. Then in the third stage you can understand and change your personal characteristics, to be very well balanced from the physical and also from your internal. It's a physical point to start, but it extends to your spirit.

FDL: *What is your advice for beginners? What are the main points that beginners have to pay attention to develop themselves in Tai Chi Chuan? How about your advice for advanced practitioners?*

MYJ: Ok, for the beginners actually the most important part is to continue and follow through. In China we have a saying: "Everything, when you start it, feels difficult. When you already have begun, then you can find your way to continue." So, at the beginning time, to continue the practice is the most important advice

for beginners – don't quit. It's very easy to quit, because sometimes before you really can understand it, you are already thinking "this is maybe too difficult for me". But actually it's difficult for everyone to start; it's not just for you. In the beginning, there is so much to take in – you need to learn the movements, you need to understand the Principles, certainly it can be too much information for you to receive at once.

So I suggest for beginners – you need to understand some basic things: first you need to understand what it is to relax, and maybe you just practice some basic standing. As far as the movements go – for sure you need to remember them – but if you cannot remember them, pay attention to the basic methods. The motions need to be gradually memorized.

For example, what is the footwork we need to do? What is the body shape we need to do? And pay attention to those basic elements, then understand those from a standing point of view, then you can gradually, gradually extend into the practice of the whole Form.

So focus on the basics. If you try and focus on everything at once you might not find anything! This is my advice for beginners.

Once the sequences become familiar and we don't need to think

about them anymore, we can be more focused on other things to understand. The Classics of Tai Chi Chuan tell us that as we gain experience through our movement practice, we need to expand into understanding our energy. For most of us, we need to realize that understanding the energy is our priority. It's not just about the movements. Movements are just a way that we express the refined energies, but our priority, actually our goal, is to understand these energies.

Understanding energy has two sides: through the Form practice, through personal practice, you have the self-understanding side. Through the practice of Push Hands, you also learn to understand the energy from your opponent. So, to better understand Tai Chi Chuan, you need to start understanding the energy perspective, not just the movement patterns.

FDL: *Thank you very much for your time and for this opportunity. It is always a pleasure for us to learn and talk about Yang Family Tai Chi Chuan with you. Your teachings will be very important to all practitioners and help us a lot.*

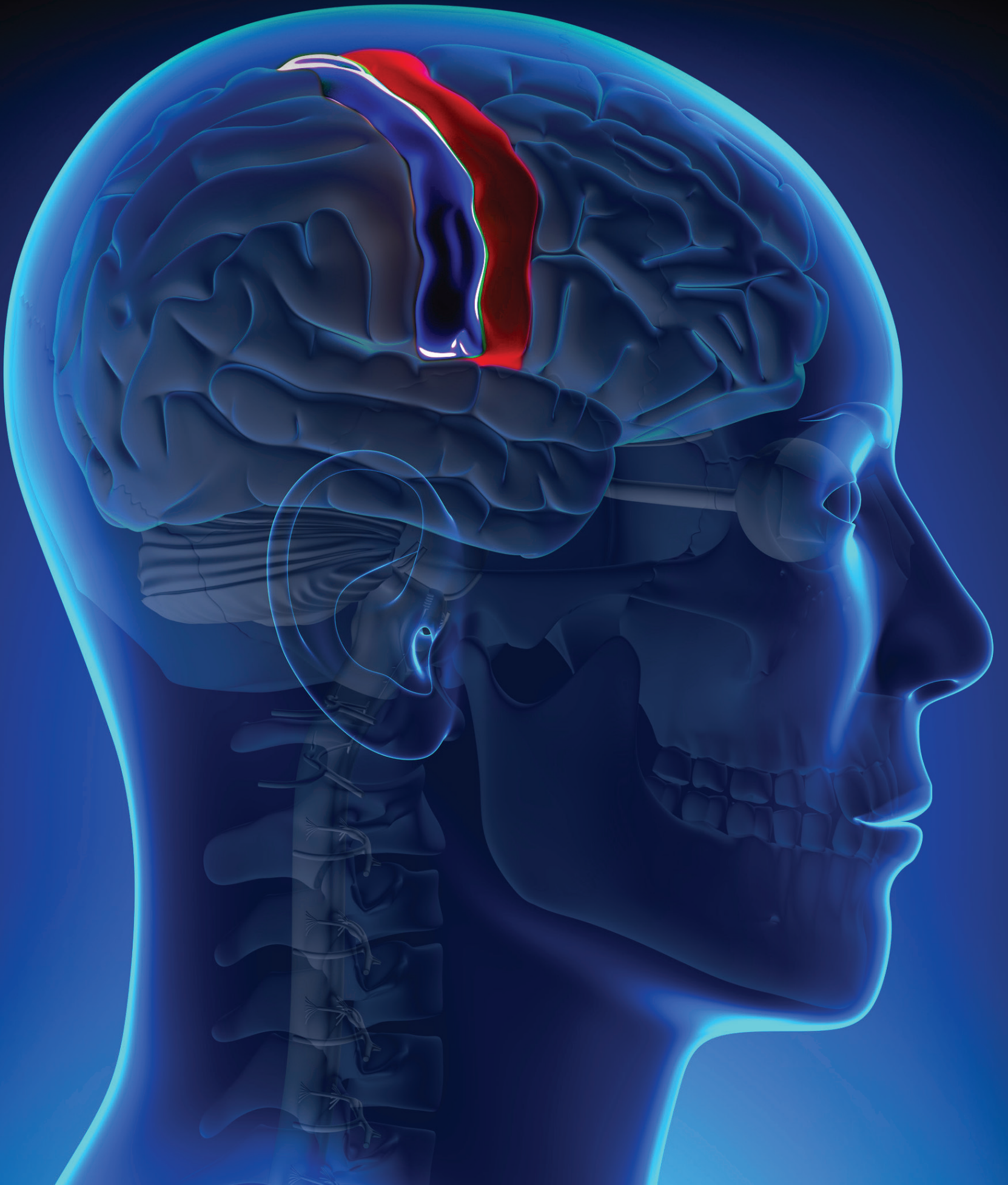
MYJ: Interviews and conversations like this are good to promote Tai Chi Chuan and help people to better understand the Art. For me it was a pleasure to help. ☯

We require that you harmonize the physical practice with your mental awareness. From this balanced combination of internal and external we can develop a unity of body, mind, and spirit.



BRAIN, BODY, BALANCE

The Learning Brain, Part 3



DANIEL E. SHULZ, M.SC., PH.D.
Director of Research at the
French National Scientific
Research Center (CNRS)

and **DAVE BARRETT**

SENSORY FEEDBACK IN ACTION

How our brains create and modify motions is a fascinating story. It involves the full focus and engagement of our mind and body. We think and feel our way into motion. We use touch sensations, vibrations from the inner ear, our eyes, the feeling of our bones, joints and muscles in free space. This entire collection of sensory information feeds into specialized areas of the brain and is looped through the nervous system back out to the body. The speed of this process is almost beyond comprehension. The precision of the outcomes defines the artistry of human expression.

FEELING THE OUTSIDE AND THE INSIDE: SOMATOSENSATION AND PROPRIOCEPTION

Most of us live a frenetic life and we seldom pay attention to the messages reaching our brain from outside and inside our body. If we stay still for a minute, we will discern three kinds of sensations. Those coming from outside the body (e.g. noises, odors, lights), those from inside the body such as the feeling of pain or hunger and in addition, a third kind of perception related to the position of the body and limbs in space and the effort of our muscles to maintain the body shape.

The sensation generated from stimuli in different modalities such as vision, olfaction and touch is called exteroception, the mechanism by which we connect ourselves with the external world. The sense that informs us on the state of internal organs such as the stretch receptors in the gastrointestinal tract or the lungs that regulate satiety and respiratory rate respectively is known as interoception. In addition to exteroception and interoception, humans are aware of their body position, motion and acceleration as well as the amount of effort being exerted by their muscles. This sense →



of posture in three-dimensional space is known as proprioception. It comes mainly from specialized sensors found in most skeletal muscles (i.e. the muscles that we use to move voluntarily). These sensors, called muscle spindles, together with other receptors in tendons, ligaments and joints, provide the proprioceptive feedback for controlling self-motion and orientation relative to gravity. The control is maintained even when the person is deprived of exteroceptive sensory information such as vision and touch. Proprioception is the foundation of our ability to monitor movements and the most important element in our sensory toolkit. This process tells us where we are in space, where a structure is in relation to the rest of the body and where and how it is moving.¹

**BALANCE:
CONTROL, LOSS AND RECOVERY**

Consider this example: You are in your kitchen and you turn from the counter to the stove. Your feet are not quite under you and you pitch slightly forward. Instinctively, you reach out to the nearest surface and with the lightest of touch re-establish your equilibrium.

What do we know about balance loss and is there anything we can do to avoid it? Even when standing still, the human body produces postural sway. This can be an expression of instabilities in body orientation relative to the upright posture. The small deviations from the upright position result in a gravity-induced rotation around an axis of the ankle, which causes the body to accelerate further away from the upright position. A corrective torque should be generated to counteract the destabilizing forces. These deviations from the balanced stance are controlled by the central nervous system through the integration of sensory information from the eyes, inner ear and somatosensory (i.e. touch) receptors. These sensory systems enter into action triggered

by feedback control mechanisms and contribute necessary sensations to correct the body posture.

Touch sensation from the soles of the feet plays a predominant role in this feedback loop. During body sway the center of mass moves relative to the feet, which changes the pressure distribution under the feet. This tactile information from the feet and other parts of the body is processed within the somatosensory system. Touch sensation starts by the activation of sensors (mechanoreceptors) in the skin that convey information about touch, pressure and vibration.

Tactile information is then relayed to the cerebral hemispheres through several brain structures. The activation of the cerebral areas that analyze tactile messages (the somatosensory cortex) is extremely fast. The nervous message reaches those areas in less than 20 milliseconds. As a comparison, the visual message corresponding to the same event reaches visual areas of the hemispheres in 50 to 70 milliseconds and it takes another 100 milliseconds to be fully analyzed. Moreover, this cortex is in direct reciprocal connection with the motor cortex. This area of the brain



organizes and controls body movements. This loop inside the brain is necessary to maintain balance: the tactile information coming from the soles of the feet is rapidly treated by the touch cerebral areas and transferred to the motor areas to produce an adapted corrective response with almost no delay. Sensory feedback from our muscles, joints and tendons is constantly in action to inform the brain and correct the self-generated deviations in stance from the upright position. These processes are automatic and usually operate without self-awareness.

LIGHT FINGER TOUCH AND STABILIZATION OF THE BODY

As we have seen, our balance depends largely on the feedback control exerted by several parallel channels of sensory information. Eye, inner ear, leg muscle feeling, ankle sensations are very important. Particularly, the importance of somatosensory information from the feet in maintaining balance is well documented. If this information is distorted or absent, like in individuals with distal sensory neuropathy, there are postural abnormalities and frequent fall accidents.

Interestingly, postural body sway in these cases can be reduced by tactile cues elicited through light fingertip or other body segment touch.² In persons with bilateral vestibular loss³, Parkinson's disease⁴ or Multiple sclerosis⁵, a light contact at the fingertip improves postur-

al stability while standing still. The fingertip contact is too light to be supportive and is efficient also while the eyes are closed. Thus, a walking cane should be of help not because it provides an enlarged mechanical base of sustain but because it provides an alternative sensory reference.

How does Light Finger Touch help improve balance? The tactile information from the fingertip is used in a feed forward manner since the correcting changes in the center of pressure under the feet follow in time the changes in pressure at the finger. In addition to the tactile feedback processing, it is remarkable that if a person has merely the intention to create light contact with a reference object, the improvement in body sway is similar to actual contact. Anticipatory processes seem to be in action while preparing the stance control with light contact.⁶ This last observation can be extremely useful while practicing Taijiquan, particularly while kicking or in other single leg postures (e.g. Golden Rooster Stands on One Leg) where we can imagine that we are lightly touching or holding a fixed bar.

Light interpersonal touch produced by another human reduces postural sway as well. It could be that the effect is due to vibratory stimuli projected by someone else's finger that enhances tactile feedback. Curiously, if a stimulator device replays the same tactile stimulus,

recorded from a human, it does not reduce sway. This implies that there must be a mechanism of sharing sensory information between the two individuals. These effects of interpersonal touch have been shown also in more dynamic situations like two persons walking next to each other and holding hands. In this situation strong and spontaneous synchronization of postural movements is observed.

MOVEMENT REDUCES TACTILE SENSATION

During movement, light tactile stimuli that are usually sensed at rest are no longer detected. Curiously, the decrease in perceptual sensitivity begins before the movement is actually performed. This means that the motor command (i.e. the preparation of the movement before it is done) contributes to the suppression in the response to externally generated tactile stimuli. If the intensity of the tactile stimulus is strong enough, movement will not suppress sensitivity completely but will anyway diminish its subjective intensity. The suppressive effect is limited to the moving limb and it is observed also in cases of passive motion, indicating that proprioceptive feedback modulates sensory perception. Of critical importance to our practice, the decrease of tactile sensation/detection depends on speed. If the movement is very slow, no suppression is observed. →



Indeed, focusing attention to one's own body results in a reduction of variations in bodily dimensions, reducing the degrees of freedom of the system.

INSIDE AND OUTSIDE COORDINATED:

Mental focus during the learning and performance of motor skills

In the last decade, several laboratories have explored the effects of attentional focus on the performance of motor skills. Attentional focus refers to the location to which a person pays attention while performing a movement. As a general observation, motor performance was improved by instructing subjects to direct their attention to external consequences of the movement rather than to the body itself or to the muscles involved in the movement.

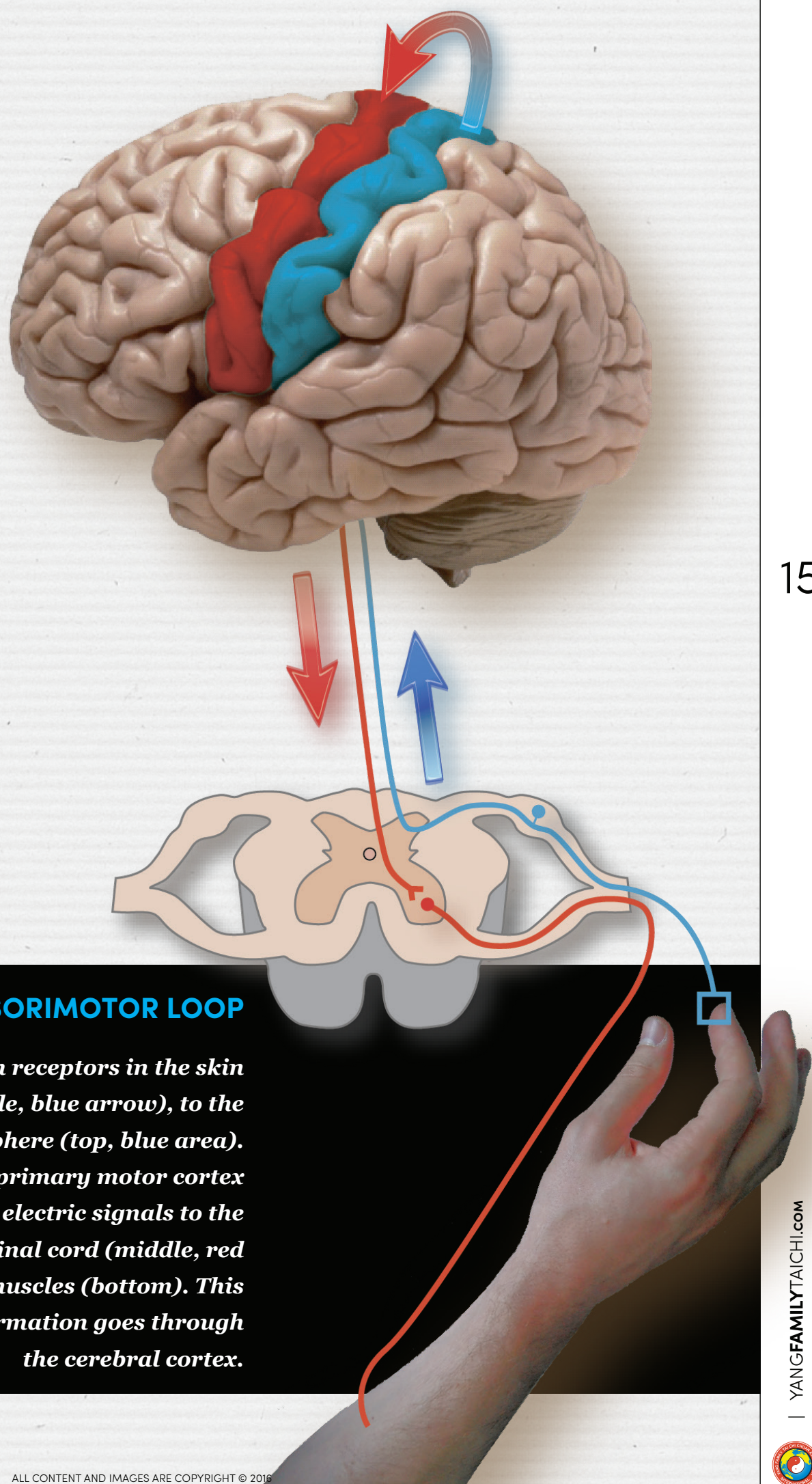
For example, it is more efficient in terms of performance to focus on a particular location of the goal while taking a penalty kick in football rather than thinking about the way the leg should be positioned or how the foot should contact the ball. This appears to be true not only for healthy populations but also for clinical populations, like people with Parkinson's disease, stroke or musculoskeletal injuries. It is worth noting that focusing attention to an external outcome of the movement is more than just distracting attention away from the body's movement. Subjects that are asked to use a goal-relevant external focus of attention perform better than subjects engaged in the same task who are asked to focus attention on a distracting target thought irrelevant to the motor performance.

Although the precise physiological mechanism responsible for this effect is not yet well known, one hypothesis for the penalizing effect of focusing attention internally is linked to the reduction in the degrees of freedom of a movement that we referred to in the second chapter of this series (The Miracle of Motion). Indeed, focusing attention to one's own body results in a reduction of variations in bodily dimensions, reducing the degrees of freedom of the system. This in turn decreases the ability to make compensatory adjustments, thus worsening the performance. Additional negative effects of focusing attention internally are the increase in the level of muscle activation (e.g. the energetic cost of the movement measured by oxygen consumption) as well as the simultaneous contraction of agonist and antagonist muscles (e.g. triceps and biceps, as measured with electromyography). This creates inefficient patterns of muscle activation for a given level of force.

Interestingly, focusing attention externally enhances the learning of balance skills in older adults. Loss of postural stability is a risk factor for falls in older people and particularly for older people with Parkinson's disease. The study showed that instructions inducing an external versus internal attentional

focus differentially affect the learning of a balance task⁷. The task required participants to stand on a balance platform tilting to the left and right, and to try to keep the platform as close to horizontal as possible during half a minute. The external focus group was instructed to concentrate on keeping markers on the platform horizontal, while the internal focus group was instructed to concentrate on keeping their feet horizontal. The external focus group outperformed the internal focus group in a retention task 24 hours later.

An issue that has not been addressed yet in this field of research concerns the value of an internal focus of attention when learning under task constraints that emphasize movement forms (learning Taijiquan) as opposed to the achievement of specific performance outcomes (hitting the target in dart throwing). →



THE SENSORIMOTOR LOOP

An electric signal is transferred from touch receptors in the skin (bottom), through the spinal cord (middle, blue arrow), to the somatosensory area of the cerebral hemisphere (top, blue area).

Sensory information is then sent to the primary motor cortex (top, red area). The cortex then sends back electric signals to the motoneurons in the ventral horn of the spinal cord (middle, red arrow), and finally back to the skeletal muscles (bottom). This is not a spinal reflex loop since neural information goes through the cerebral cortex.





**USE MIND NOT FORCE:
Traditional teaching methods &
Neuroscience**

At a recent seminar in Paris, Grand-master Yang Jun was asked where attention should be focused during the practice of Taijiquan. He made a distinction between three stages of learning. For beginners, the attention should be focused on the body and on the Ten Essential Principles of Yang Chengfu, particularly those related to body arrangement. As they advance, practitioners should keep applying the Ten Essential Principles but should also imagine a virtual partner on which movements are applied. This means the transfer from an internal to an external focus of attention. Finally, in the refined stage of practice the spirit should be clear (*Shen Ming*). The body is moving but the spirit should stay centered.

While there are experimental evidences for the first two stages described by Master Yang, no specific research has been conducted to test the last stage. Delivering internally focused instructions and feedback (i.e. on the movement itself) during the first phases of learning of

Taijiquan should be more effective in allowing beginners to reproduce and acquire the movements. This is because for complete beginners, a solution for the new movement, pattern might not exist in their repertoire and instructions focused internally may be of help to establish a basic coordination pattern that will be further developed with practice.

Once an approximation of the movement has been acquired, the instructions should be more externally focused to emphasize the movement outcomes (i.e. the effect of the action). With increasing sophistication of performance (e.g. use of internal energy), the coordination and the control of the movements are transferred to lower levels of the central nervous system. Internally directed focus of attention at this level of practice can overload and disrupt the low level self-organizing process and be detrimental to the movement performance. Little disruption is exerted on them by directing the focus of attention externally. Thus, at this more advanced stage of practice, providing information about the martial application of a given movement is most beneficial. →

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- 1 Cohen, Bonnie Bainbridge, *Sensing, Feeling and Action*, Pgs 114-121
- 2 Baldan, A.M., Alouche, S.R., Araujo, I.M. and Freitas, S.M. (2014) Effect of light touch on postural sway in individuals with balance problems: a systematic review. *Gait Posture* 40:1-10.
- 3 Lackner, J.R., DiZio, P., Jeka, J., Horak, F., Krebs, D. and Rabin, E. (1999) Precision contact of the fingertip reduces postural sway of individuals with bilateral vestibular loss. *Exp Brain Res* 126:459-466.
- 4 Franzén, E., Paquette, C., Gurfinkel, V. and Horak, F. (2012) Light and heavy touch reduces postural sway and modifies axial tone in Parkinson's disease. *Neurorehabil. Neural Repair*. 26: 1007-1014.
- 5 Kanekar, N., Lee, Y.J., and Aruin, A.S. (2013) Effect of light finger touch in balance control of individuals with multiple sclerosis. *Gait Posture* 38:643-647.
- 6 Bove, M., Bonzano, L., Trompetto, C., Abbruzzese, G. and Schieppati, M. (2006) The postural disorientation induced by neck muscle vibration subsides on lightly touching a stationary surface or aiming at it. *Neuroscience* 14:1095-1103.
- 7 Chiviakowsky, S., Wulf, G. and Wally, R. (2010) An external focus of attention enhances balance learning in older adults. *Gait & Posture* 32:572-575.

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CONCLUSION:

Progression of Practice

SUMMARY OF KEY POINTS FROM THE LEARNING BRAIN SERIES

As we learn Taijiquan the nervous system gradually finds the way to reproduce complex motions. Sensory feedback is constantly in action to inform the brain and correct deviations from the observed model. The learning process is described by the Yang family as having three levels.

THE APPROXIMATE LEVEL:

The initial process of seeing the motion and trying, and then repeating the sequence creates neuronal pathways that are strengthened through regular, consistent and dedicated practice. We can learn complex Taijiquan sequences by recruiting neuronal plasticity present in young and older adults. Practicing with attention and intention is known to help this process.

- Patience is required as the brain resolves contradictions between the observed form and the practiced motion.
- The brain restricts freedom of motion to do new, unfamiliar actions. Stiffness is a natural result and to be expected.
- The perceived difference between the teacher's level and the beginner's level inhibits and slows learning.
- An incrementally reinforced teaching protocol should encourage every small improvement.
- Teachers should offer internally focused instructions: footwork, body positions and hand shapes; weight shifting methods; how to use the waist and torso.
- A balanced teaching strategy should use negative reinforcement for accelerating skill acquisition and positive reinforcement to promote long-term retention.

THE DETAILED LEVEL:

Once the sequences have been memorized and can be performed without interruption, the real work of learning Taijiquan begins. Master Yang Jun describes this as gradually smoothing out the sharp corners of a piece of woodwork.


- Proficiency relaxes restrictions the brain places on freedom of motion and/or relaxation of restrictions by the brain is what leads to proficiency.
- Mirror neurons are most effectively recruited by viewing the modeled motions from different angles and performing with a group.
- As the teacher's model and the student's performance come into alignment, a synergistic effect enhances recruitment of mirror neurons, improving the learning process.
- External focus on martial applications and an opponent improves practice and performance.

THE REFINED LEVEL:

At this point, traditional Taijiquan moves into territory largely unexplored by Neuroscience. The challenge is to objectively evaluate many decades of repetition, cultivation, observation and inquiry into the nature of mind, motion and the cosmos. How do we quantify a state of being? There are some key milestones dedicated by previous generations of Masters who have travelled this path.

- *Yi Qi Jin*: Mind intent leads intrinsic energy, creating motion.
- Fully integrated memory, sensory information and direct attention.
- Tranquility in motion: optimum control of equilibrium.
- *Shen Ming*: spirit clear, total awareness, maximum consciousness.

POSTSCRIPT

In all three parts of this series, The Learning Brain, we have established relationships between knowledge gained by modern Neuroscience research and certain aspects of the learning and teaching of Taijiquan. We are intimately convinced that investigations into brain and body functioning can help us to acquire a better understanding of the physiological basis of Taijiquan and consequently to propose adaptations of the teaching strategies both for healthy and clinical populations of Taijiquan practitioners. 





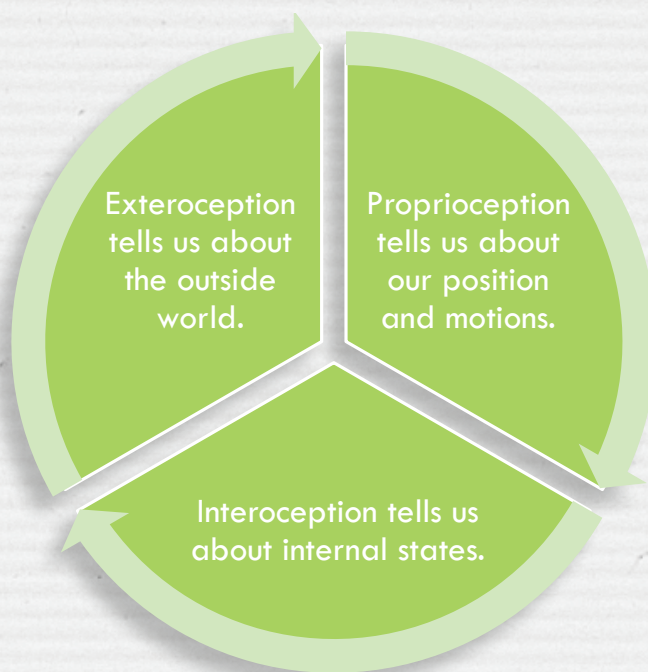
THE ANNOTATED LEXICON

The Learning Brain, Part 3

BY HOLLY SWEENEY-HILLMAN, M.Sc.

Center Director, Academy Instructor

Three Kinds of Sensory Information



Our sense of posture in space is known as proprioception derived from specialized sensors



Specialized proprioceptive sensors:

LOCATION	STIMULATION	RESPONSE
I. Golgi tendon organ		
<ul style="list-style-type: none"> • Muscle/tendon junction <ul style="list-style-type: none"> • Fascia • Ligaments • Joint capsules 	Slow deep stretch close to attachment areas combined with non-ballistic movement.	DECREASES muscle tone.
II. Paccini corpuscle		
<ul style="list-style-type: none"> • Deep tissues • Spinal ligaments • Musculotendinous junctions • Fascia 	Rapid mechanical stress like stretching, compression, deformation, vibration, forceful manual manipulation, rhythmic mobilizations.	Proprioceptive signal, very brief in duration.
III. Ruffini end organs		
<ul style="list-style-type: none"> • Peripheral ligaments • Dura mater • Outer layers of joint capsules 	Slow mechanical pressure with lateral shear.	Helps determine degree of angulation of joints. Decreases activity of sympathetic nervous system creating calming affect.
IV. Interstitial or free nerve endings		
<ul style="list-style-type: none"> • Most abundant receptor • Found everywhere in the body • High density in periosteum (fibrous membrane covering bones) 	Techniques that stimulate periosteum and septi of bones and interosseous membranes. Sensitized by neurotransmitters (e.g. acetylcholine, epinephrine, endorphins, etc.)	<ul style="list-style-type: none"> • Increases vasodilation • Increases plasma extrusion • Increases interoception, mechanoreception and nociception
V. Muscle spindle		
<ul style="list-style-type: none"> • Muscle fibers • NOT found in fascia or other connective tissue 	Stretching muscle	Increases muscle fiber contraction and inhibits antagonist muscle.

BALANCE



REFERENCES

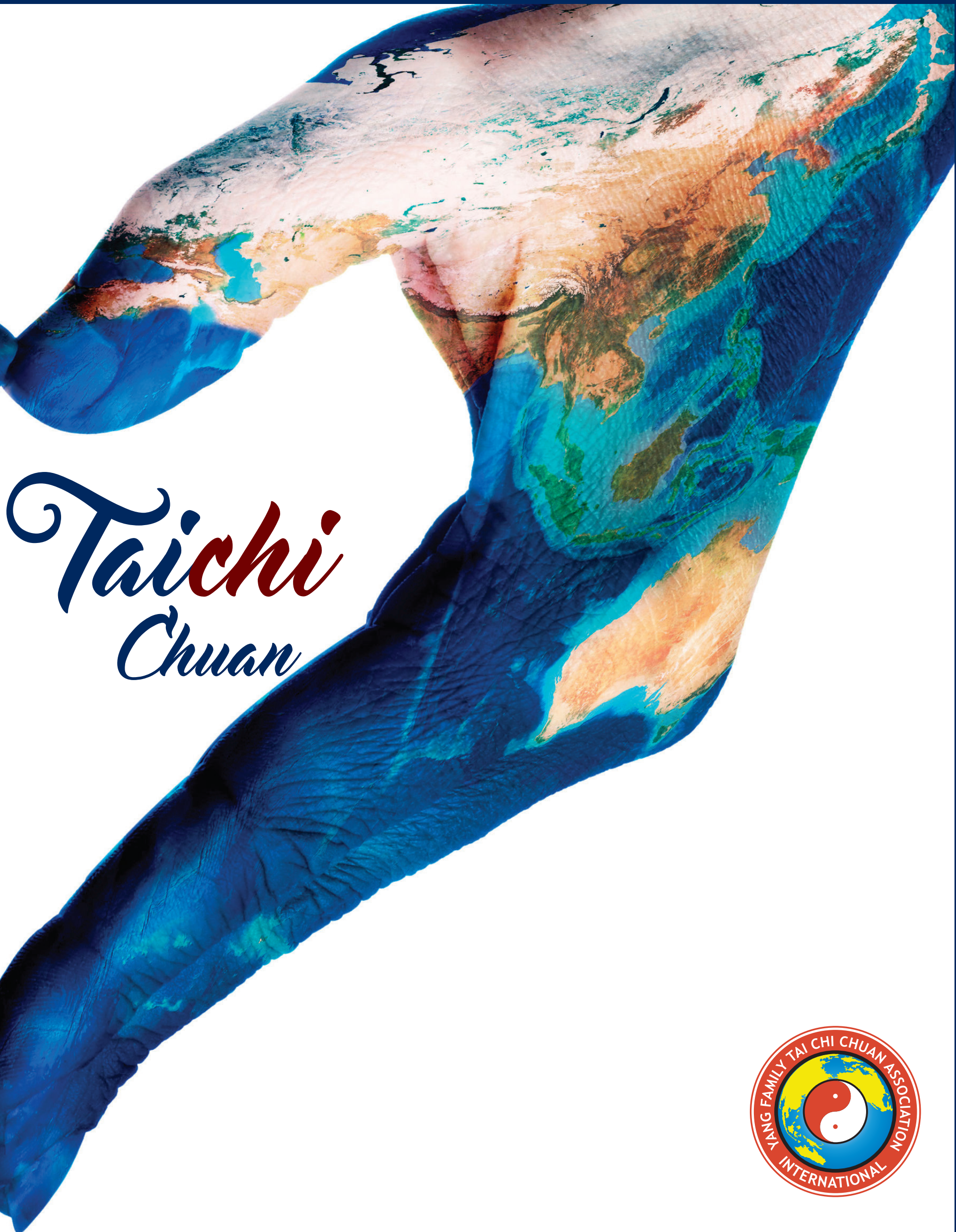
The Pelvic Girdle, Diane Lee, Churchill Livingstone, 2011, pgs. 44-46
Physiology of the Human Body 6th edition, Arthur Guyton, Saunders College Publishing, 1984, pgs. 195-196, 131-133





We Love

The purpose for the International Yang Family Association is to enable everyone to work closely together to promote Yang Family Tai Chi Chuan worldwide.



*Taichi
Chuan*





YĀO, KUÀ, DĀNG & DĀNTIÁN

Questions and Answers

BY EDWARD MOORE

Academy Instructor

What is the relationship between the Yāo and the Dāntián?

MASTER YANG: The Yāo is the more physical part of the two. The Dāntián is how we use the breathing. The energy is stored in the Dāntián (丹田). The leading point is the mind, not the Dāntián. In English, the waist is linked to the belt area and includes the front part of the body. In Chinese, when we talk about the Yāo we are not referring to the front of the body, only the back. In China, there is a common term for the waist, Yāo, (腰) which also means kidney. In Tai Chi, when we refer to the Yāo,

we are not talking about the kidneys. There is a specific place called Mìng mén (命門) which can be translated as “vitality gate” in English. This is a specific point related to the Yāo, but we do not want you to think of only this point. Instead, think of the general area of the lower back. If you imagine a weight lifting belt, the part of the back that the belt covers is the part that we consider to be the Yāo in Tai Chi. Think of this larger area of the lower back as the Yāo, but can you move the back of the waist without also moving the front? No. The front of the body also turns. →



Questions and Answers

How do we relax the Yāo?

MASTER YANG: Drop the tailbone like you are about to sit down on a sofa. We need to drop the tailbone first in order to relax the Yāo, but why do we want to relax the Yāo? The first answer is to make the Yāo flexible and agile. If we do not release the lower back downwards, it will not be agile. Second, the Yāo is between the upper and lower body, so it needs to relax in order to coordinate the upper and lower body. The classics say to use the Yāo to lead the movements: Mìngyì yuántóu zài yāo xì (命意源头在腰隙). Tai Chi uses a flexible whip-like energy. The source of a whip's energy is from the handle, and the Yāo is like the handle of the whip when we are practicing. The Yāo is the source, and it also controls the energy.

We can understand the use of the Yāo intellectually, but it takes time and practice to actually build up skill.

Practice brings improved coordination, and better coordination can improve your understanding of how internal energy and external physical movements can support each other. Improved Yāo technique increases coordination and agility. It also helps to control energy through the use of the three Yāo circling methods: vertical circling, horizontal circling, and a mix of both vertical and horizontal which we call "figure eight" in English (挽花, Wǎn huā, which can be literally translated as "encircling flowers"). We also have three methods that the Yāo can lead the limbs with: swinging, rotating, and swinging and rotating mixed together. Energy storage and the release of energy in Tai Chi are both controlled by the Yāo. When releasing energy the Yāo controls the delivery of energy, determining the direction of the energy and where the energy will stop.

Can we use the Yāo energy alone without leg movement, such as in a horse stance?

MASTER YANG: We do use this kind of Yāo movement in the single posture practice when we are standing in a horse stance and using the Yāo energy. It may seem that the legs are not involved, but they actually are, because they are still supporting the Yāo movement from the lower body.

Questions and Answers

What is the relationship between the Yāo and the Kuà?

MASTER YANG: The Yāo and the Kuà (跨, hips) often move together, so they can seem like the same thing, but they are not. When we practice the form, the Kuà is involved in the movement in order to have mobility, but the Kuà and the Yāo still have separate functions. During the movement Brush Knee and Push for example, the Kuà should be slightly open to keep the crotch open (crotch = 裆 Dāng). In Brush Knee and Push, part of the turning of the upper body involves the Kuà, and part of the turning involves the Yāo. The hip/crotch/leg-shape should match the

5 directions: 前进、后退、左顾、右盼、中定 (Forward, back, look left, gaze right, and central equilibrium) in order to have support and be stable all around. If there is no support from below, you cannot use the Yāo. The combination of the Kuà, the Dāng, and the Yāo support the upper body like the suspension of a chassis on a car, and allow the Yāo to deliver the energy. This is called “Dāng/Yāo /Jin” (裆腰劲). If the lower body cannot support the Yāo, it will be difficult to use the Yāo correctly. The Kuà does need to be flexible, but it should not move too much, or you will not be able to deliver the energy to the upper body.

Do we use the rotation of the upper legs in the hip joint as part of the Yāo movement?

MASTER YANG: This kind of rotation does happen during the transition to single whip, but it's not really used to deliver energy from the lower body to the upper body. It can affect your rooting, making your chassis too soft to support the upper body. ☯



TAIJI SABER 太极刀

BY RUBÉN COIRINI

Affiliated School Director,
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Saber is one of the two most popular short weapons in Chinese Martial Arts. The other is the straight sword. It is usual to use one saber at a time. This method is called "dan dao" (单刀) or single saber. To use two sabers at the same time is called "shuang dao" (双刀) or double saber, for instance, in Chen Taijiquan. There is a great variety of sabers. There are short, medium and long ones. Among short sabers, the most popular is the called "niu wei dao" (牛尾刀) or oxtail saber. Its blade is wide; its shape is like a scimitar

and is the regular saber for almost all styles. Besides this broadsword, there is the "nine ring saber", the "double butterflies knives", the "miao dao" (苗刀) a long and narrow saber used with two hands, the "da kan dao" or big chop saber and longer, for used by or against cavalry, the "pudao" (朴刀) or simple saber and the "guan dao" (关刀) or General Guan's saber, etc.

The dao was the first weapon taught to Chinese soldiers, as its usage depended more on strength and speed, unlike the subtle energies that the straight sword requires. →

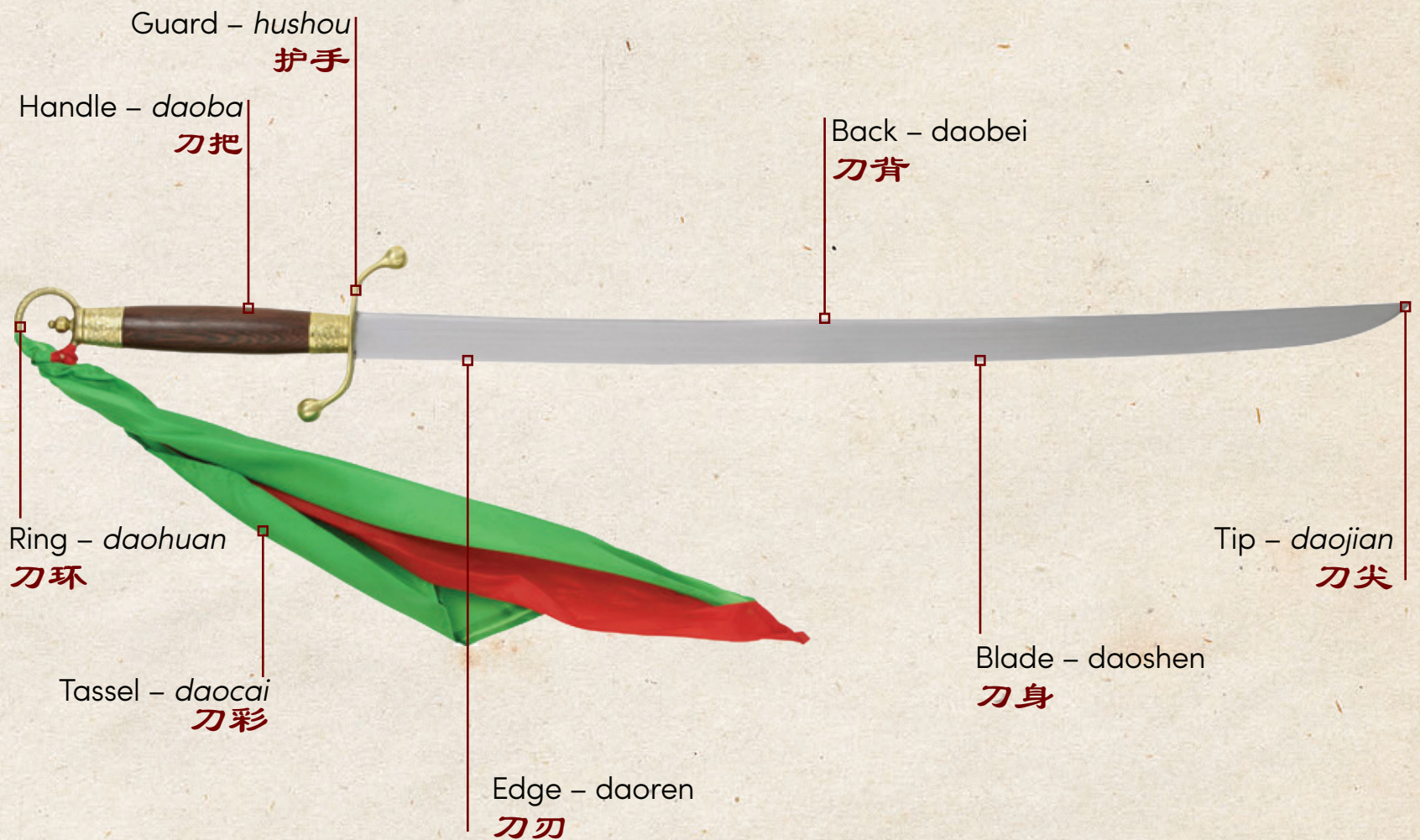


So the infantry, with very little training, could go into battle and use the saber efficiently. Saber techniques are simpler, and due to being a single-edged weapon, need less skill than the double-edged straight sword.

Yang Family Taijiquan has an official saber. There's no record about who adopted it. It is like a western cavalry saber and the main feature is its great momentum, which allows for cuts at high speed. With a special shape, its blade is longer and narrower than a regular saber, so the applications are subtle.

The guard is different too, with its "S" shape. This not only protects the hand but also can be used to engage an opponents weapon with a twisting movement. It's called the Taijidao and is used exclusively by this martial art.

Chinese people say that the saber's spirit is tiger-like and the straight sword is dragon-like. One is strong and savage. The other is graceful and subtle. Grand Master Yang Zhenduo says that the Taijidao forms should be executed with power, elegance and distinction.



USE

The Taijidao is held with one hand at a time, though the other hand is always moving, blocking or striking the opponent or balancing the blade's displacement. For experts, the skill level is not seen in the movement of the dao, but in the empty hand, as it is said in Chinese: "dan dao kan shou" 单刀看手 ("in single saber, look at the hand").

There should be coordination between the saber, the empty hand and legs. Here, the same principles of Taijiquan must be applied: energy is generated by the legs, routed by the waist and manifested by the arms and hands and, finally, projected by the broadsword. The Ten Essentials need to be followed. If they are not used, you would not be able to deflect 1000 pounds with 4 ounces!

Grand Master Yang Zhenduo says that the saber's manner is full of power and grandeur; the postures are smooth and free.

TASSEL

What's the meaning of a piece of cloth hanged from saber's ring? I've been told that in ancient times, in real fighting situations, tassels were used to distract the opponent's attention with their bright colors moving from side to side, allowing the swordsman to be tricky, hiding his real intentions. Besides, he could dry his sweaty or bloody hands or, even more, he could catch the saber in case it slipped away from the hand.

I don't know if all these things are true. Many find that using a tassel is just a way of increasing the difficulty in handling the weapon. It can be an indicator that the movements are done with the right speed and Jin. We know, for instance, that accelerating a bit more than required, can make the tassel tangle our wrists.

Master Yang Jun says the tassels are for decoration, to complete the weapon. Why are they red and green? Grandmaster Yang Zhenduo says they represent the wild spirit of the tiger. →

FORMS

The Traditional Yang Style Saber Form has 13 movements. The form names are described by a poem, each line using seven characters. These phrases cover many motions in a given passage. This can be confusing, as it is sometimes difficult to interpret the actual sequences from the poetic lines.

Although the performance is based on empty hand principles, it should be more energetic and vivid, done at a higher speed that is even faster than the sword form.

- | | | |
|-------------|--|--|
| 1. 七星跨虎交刀势 | <i>Qi Xing Kua Hu Jiao Dao Shi</i> | Seven stars to Mount the tiger, Wielding saber forms. |
| 2. 腾挪闪展意气扬 | <i>Teng Nuo Shan Zhan Yi Qi Yang</i> | Spring-and-clear to Daze-and-strike with Will and spirit raised. |
| 3. 左顾右盼两分张 | <i>Zuo Gu You Pan Liang Kai Zhang</i> | Looking leftward, Gazing right, the Two components spread. |
| 4. 白鹤亮翅五行掌 | <i>Bai He Liang Chi Wu Xing Zhang</i> | White crane displays its wings to Palm the five-fold states. |
| 5. 风卷荷花叶里藏 | <i>Feng Juan He Hua Ye Li Cang</i> | Breezes turn the lotus bloom to Hide it in the leaves. |
| 6. 玉女穿梭八方势 | <i>Yu Nv Chuan Suo Ba Fang Shi</i> | Treasured maidens work their shuttles facing eightfold ways. |
| 7. 三星开合自主张 | <i>San Xing Kai He Zi Zhu Zhang</i> | Triple stars open, close, Extending to their will. |
| 8. 二起脚来打虎势 | <i>Er Qi Jiao Lai Da Hu Shi</i> | Double legs arising come and Strike the tiger pose. |
| 9. 披身斜挂鸳鸯脚 | <i>Pi Shen Xie Kua Yuan Yang Jiao</i> | Drape the body, hang aslant, and Kick like doting ducks. |
| 10. 顺水推舟鞭做篙 | <i>Shun Shui Tui Zhou Bian Zuo Gao</i> | With the current, push the boat, the Whip can be a pole. |
| 11. 下势三合自由招 | <i>Xia Shi San He Zi You Zhao</i> | Lower posture, Thrice combining, freedom calls to roll. |
| 12. 左右分水龙门跳 | <i>Zuo You Fen Shui Long Men Tiao</i> | Leftward, rightward cleaving streams, the Dragon gate to crest. |
| 13. 卞和携石凤还巢 | <i>Bian He Xie Shi Feng Huan Chao</i> | Old Bian-He retrieves his stone and Phoenix returns to nest. |

STORIES ABOUT THE FORM'S NAMES

Seven Stars

In Chinese culture, there are many references to the seven stars of the Big Dipper. In martial arts, this refers to the most important parts of the body: head, shoulders, elbows, hands, waist, knees and feet.

Jumping The Dragon's Gate

Chinese legend tells us that every year, in March, when the peach trees flower, snow from the Yellow River's upper reaches melts. The river suddenly swells and runs fiercely. Carp from the Eastern Sea swim upstream and gather at the Dragon's Gate to join the Great Tournament organized by the Jade Emperor. In flood season the river runs so fast that it makes big waves, big as mountains. Carp that succeed in jumping the Gate are transformed into beautiful dragons. Those who do not succeed swim back to the Eastern Sea, to train until the competition next spring.

Three Stars

Among Taoism's most popular characters are the well known "San Xing", Three Stars or Three Happiness's. Taoists love these divinities and respect them very much. They are Fuxing, "Star of the good luck", God of happiness; Shouxing, "Star of old age", God of longevity and Luxing, "Star of well being", God of official positions and well being.

Mandarin Duck Kick

Yuan Yang Jiao (鸳鸯脚) is referenced in the classical Chinese book, "Outlaws of the Marsh" (水浒传), also known as "The Liangshan Rebels", by Shi Naian. There, one of the rebels, Wu Song (武松), famous for his strength and martial arts ability, killed a tiger only with his hands (the "strike the tiger" movement comes from here, too). His kicks techniques were called "mandarin duck kicks" or "duck and drake feet". He also fought at the Mandarin Duck Tower (Yuan Yang Lou).

The names of these leg techniques are present in several Chinese martial arts, like Mantis Tang Lang Quan (mandarin ducks leg - yuan yang tui), Chuo Jiao Quan, etc. They refer to a double kick. Mandarin ducks are always in a pair (male and female, yin and yang), both on water and on land. Double kicks also come in pairs: one low (yin) and the other, high (yang). In the Taijido Form, it seems that low kick has been removed, thus leaving just the high kick, the same as in the "Double legs arising..." movement.

Old Bian He

A man called Bian He, from the Chu state, saw a phoenix flying over a mountain in Shennongjia. He was sure that there was some kind of treasure on that peak. After searching vigorously, Bian He found a piece of jade. He decided to present the valuable jade to the Emperor to show his official loyalty to his sovereign, Chuli. But when the King called the court jeweler, the scholar judged it as a valueless stone, which made Emperor Chuli very angry. He cruelly ordered Bian He's left foot cut off as a punishment.

Bian He decided to submit the jade to the new Emperor Chuwu, to clarify matters after he ascended the throne. Emperor Chuwu also had it checked by the court's jeweler and the conclusion was the same. Bian He lost the other foot.

After the death of Emperor Chuwu, the prince Chuwen was enthroned. Again, Bian He took his stone to the palace and stayed at the gate crying sadly for seven days and nights. And it happened to be heard by the emperor in the court. He ordered his men to find out why he was so sad (foot amputation was common during those days). Bian He answered that he was not weeping for his feet, but that his invaluable gift was considered as a common stone and he, a loyal man, was considered a joker. Emperor Wen ordered the stone broken open and discovered the jade inside it. In honor of Bian He's determination, the stone was named He's Jade. →





THIRTEEN SABER TECHNIQUES

In general, we can say that there are four fundamental motions:
cutting, slashing, blocking and parrying.

砍、**Kǎn**, chop:

Like Pi, this is a powerful downward chop that uses the forearm. Usually, it follows a diagonal path toward the target.

剁、**Duò**, clip, mince:

To cut the wrist with a slicing motion, generally, at a short distance.

劈、**Pī**, hack, split in two:

A large, powerful chop that uses the whole arm. Usually, it is directed downward.

截、**Jié**, intercept:

To block the opponent's weapon or arm.

撩、**Liāo**, lift up:

An upward cut that can be forceful or light.

扎、**Zhā**, bind, plunge, prick:

A short distance thrust that is fast and sudden.

刺、**Cì**, stab:

The tip is thrust forward. It is a powerful skill.

缠、**Chán**, tie up, wrap:

Chantou guannao is a wind-up block and wrap around the head.

扇、**Shàn**, fan, stir up, incite:

A defensive movement with the back of the blade, knocking away the opponent's weapon.

拦、**Lán**, block:

A parry skill that can originate from any direction. It blocks an opponent's weapon.

滑、**Huá**, slide:

Contact the opponent's weapon, then slide the saber quickly toward him, cutting his hand or other part of his body.

划、**Huà**, slice:

The tip of the saber is used to make a linear cut in the target; a quick and delicate movement.

刮、**Guā**, scrapes:

A long shallow cut with the edge of the saber on the opponent's arm.

SOURCES

1. "Taiji Dao" DVD, by Master Yang Jun, from IYFTCCA
2. "Yang Style Taiji Dao" DVD, by Grandmaster Yang Zhen duo and Master Yang Jun, from Zhong Huan Culture Production.
3. "Yang Style Taiji Falchion" DVD, by Great Master Yang Zhen duo and Master Yang Jun, from Beauty Video (Qiáo Jia Ren 俏佳人), The People's Publishing House of Sports (人民体育出版社)
4. *The Complete Taiji Dao, The Art of the Chinese Saber*, by Zhang Yun. Blue Snake Books, Berkeley, California.
5. Taiji Dao Seminar taught by Master Yang Jun
6. "Saber Form 13 Posture Poem" translated by Audi Peal, from IYFTCCA Web Page.
7. *Outlaws of the Marsh*, by Shi Naian and Luo Guanzhong, Foreign Language Press, Beijing, chapters 23 & 29
8. "Taiji Saber DVD", by Master Yang Jwing Ming, YMAA Publications



1 — Seven stars to Mount the tiger, Wielding saber forms.



1 Preparation: Feet shoulder-width apart and parallel. Follow the Principles of Tai Chi Chuan. Left hand holds the saber and the saber blade touches the left forearm.

2 Shift slightly to the left, use waist to rotate body, right foot turns in 45°. Lift the left arm; make a fist with the right hand.

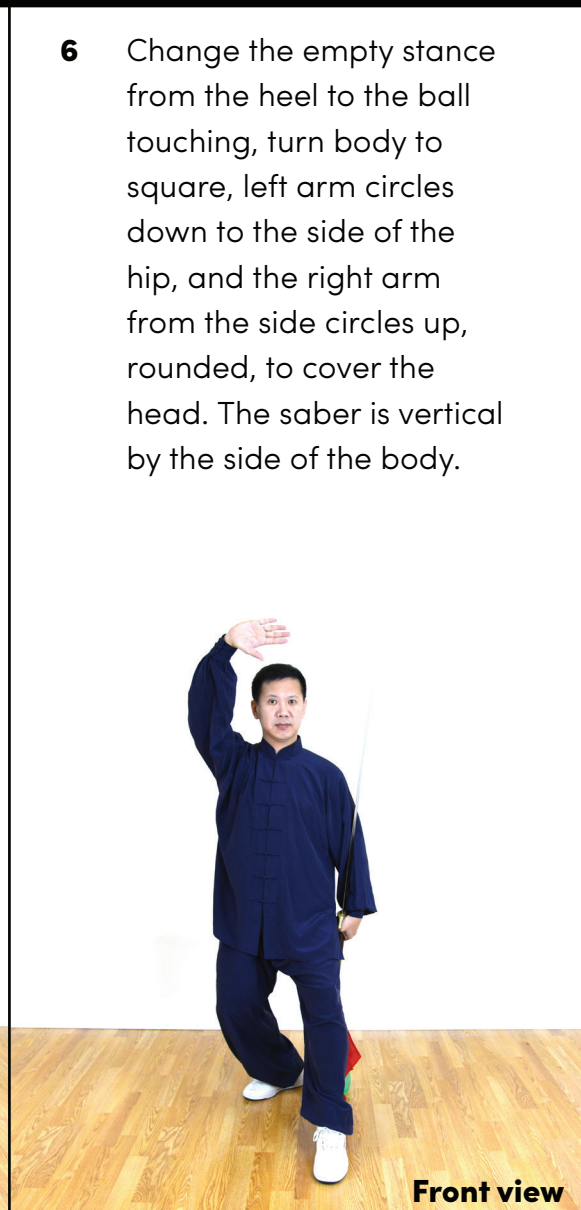
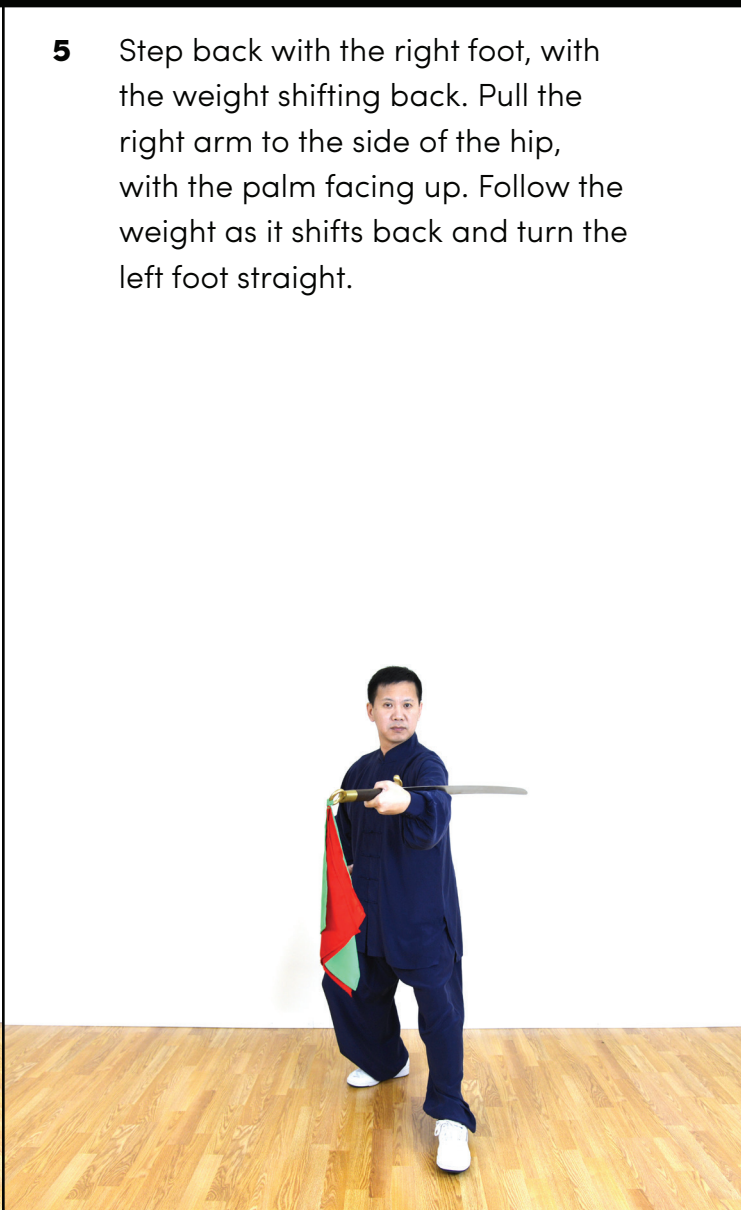
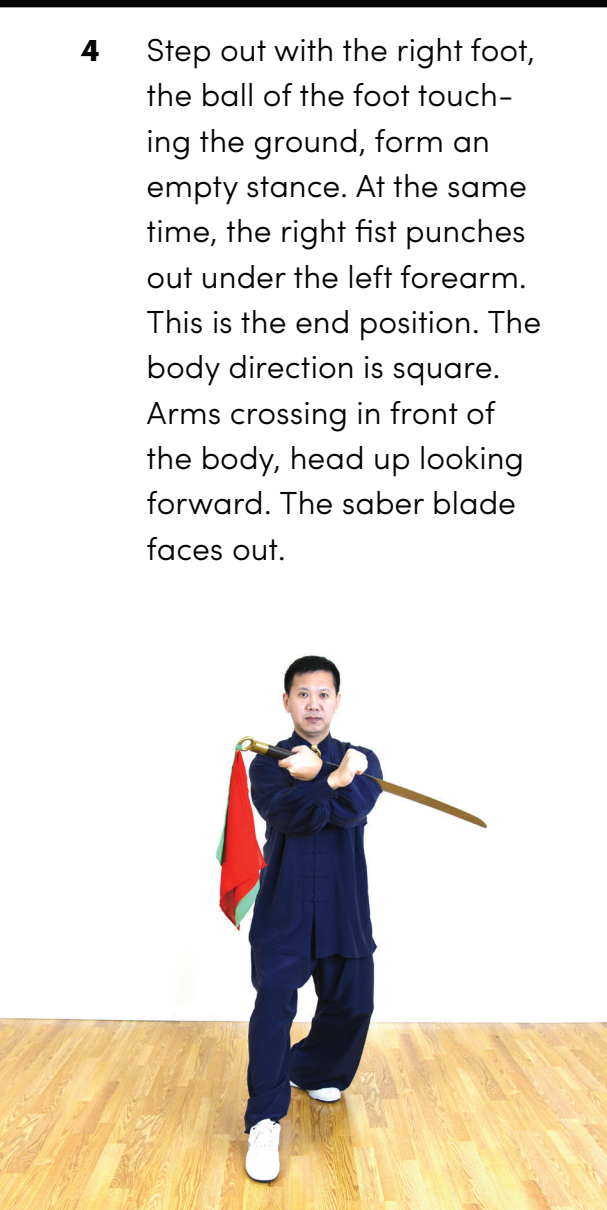
3 Sink weight onto the right leg; step out with the left foot, right foot remains open to corner. At the same time, continue lifting the left arm close to shoulder level. The saber blade touches the left forearm, facing diagonally up. Right arm lifts and sets the fist by the side of the waist.



4 Step out with the right foot, the ball of the foot touching the ground, form an empty stance. At the same time, the right fist punches out under the left forearm. This is the end position. The body direction is square. Arms crossing in front of the body, head up looking forward. The saber blade faces out.

5 Step back with the right foot, with the weight shifting back. Pull the right arm to the side of the hip, with the palm facing up. Follow the weight as it shifts back and turn the left foot straight.

6 Change the empty stance from the heel to the ball touching, turn body to square, left arm circles down to the side of the hip, and the right arm from the side circles up, rounded, to cover the head. The saber is vertical by the side of the body.



Front view



2 — Spring-and-clear to daze-and-strike with will and spirit raised.



- 7** Turn body to the right, circle left arm to the right following body rotation. Right arm drops down to the right so both hands are close together. Make sure the right armpit is open and left arm rounded. The right elbow is turned down. The body faces in a 45° direction towards the right.

- 8** Step out with the left foot forming a bow stance, feet shoulder-width distance apart.

- 9** As the weight shifts forward, arms circle to the front of the body while the right hand grabs the saber handle. The body direction is squared.



Front view





10 Shifting back slightly, open the left foot to the corner. Rotate the left arm with the palm facing down under the right arm.

11 As the weight shifts forward, stand up, picking up the right leg. Stand on the straight left leg. Coordinate with the shift forward, opening the arms to the sides of the body, arms slightly lower than shoulder. Sink the chest, body direction squared, looking forward.

12 Close the arms in front of the body, the left palm touching the right wrist.



Front view





13 Squat down and step with the right foot, toes open to the corner. Keep a central line between your feet, with one foot on either side of the line.

14 Shifting forward, turn the body to the right, and circle the saber to the right side of the body following the rotation. The saber tip points forward. Pick up the left foot. The left arm follows the saber circling to the right.

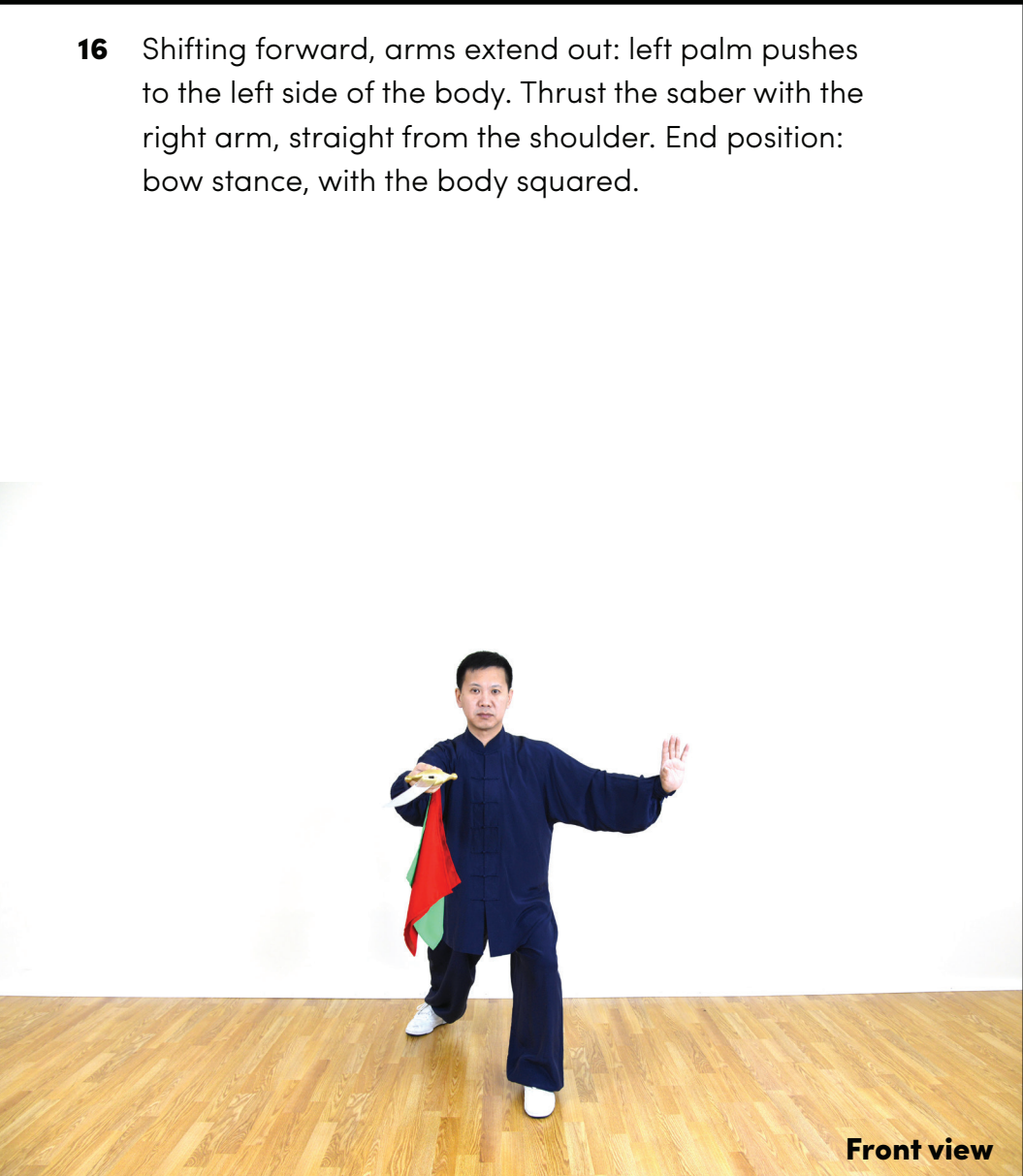
15 Turn body to square, step straight out with the left foot. Body rotating; sit the left palm on the left side of the chest. Rotate the saber and position it above the right hip. At this time, the right palm faces up and the saber is level, tip pointing forward.



Front view



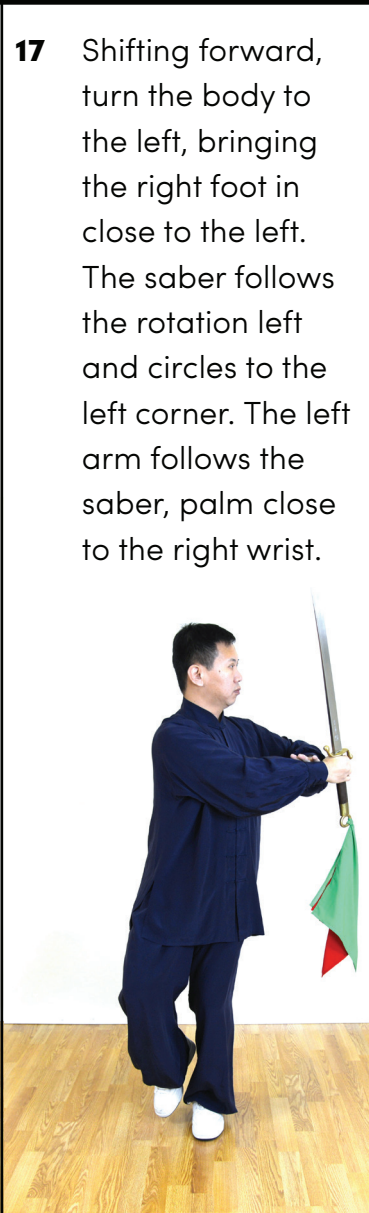
16 Shifting forward, arms extend out: left palm pushes to the left side of the body. Thrust the saber with the right arm, straight from the shoulder. End position: bow stance, with the body squared.



Front view



17 Shifting forward, turn the body to the left, bringing the right foot in close to the left. The saber follows the rotation left and circles to the left corner. The left arm follows the saber, palm close to the right wrist.



18 Turning to the right, right foot steps out pointing to the corner. The saber continues to circle to the center of the chest, with the tip pointing at a downward angle of 45°. Position the left hand at the back of the saber, one third of the way down from the tip of the blade.





19 As the weight shifts forward, push the saber out.



20 Shift forward; bring the left foot in, toes pointing to the corner.



21 Step back with your right foot, with the toes pointing straight.



Front view



Side view



Side view



22 Shift weight back, bring your left foot in and at the same time, bring the saber close to your chest. Keep the saber angle downward at 45 degrees°.



23 Left foot steps out to the corner forming a bow stance, feet shoulder-width apart.



24 As the weight shifts forward, push out the saber.



Side view





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